## §90.117

## § 90.117 Certification procedure—test engine selection.

(a) For Phase 1 engines, the manufacturer must select, from each engine family, a test engine that the manufacturer determines to be most likely to exceed the emission standard. For Phase 2 engines, the manufacturer must select, from each engine family, a test engine of a configuration that the manufacturer determines to be most likely to exceed the HC+NO $_{\rm X}$  (NMHC+NO $_{\rm X}$ ) Family Emission Limit (FEL), or HC+NO $_{\rm X}$  (NMHC+NO $_{\rm X}$ ) standard if no FEL is applicable.

(b) The test engine must be constructed to be representative of production engines.

[60 FR 34598, July 3, 1995, as amended at 64 FR 15239, Mar. 30, 1999]

## § 90.118 Certification procedure—service accumulation and usage of deterioration factors.

(a)(1) The test engine must be operated with all emission control systems operating properly for a period sufficient to stabilize emissions.

(2) The period sufficient to stabilize emissions may not exceed 12 hours.

(b) No maintenance, other than recommended lubrication and filter changes, may be performed during service accumulation without the Administrator's approval.

(c) Service accumulation is to be performed in a manner using good engineering judgment to ensure that emissions are representative of production engines.

(d) The manufacturer must maintain, and provide to the Administrator if requested, records stating the rationale for selecting a service accumulation period less than 12 hours and records describing the method used to accumulate hours on the test engine(s).

(e) For purposes of establishing whether Phase 2 engines comply with applicable exhaust emission standards or FELs, the test results for each regulated pollutant as measured pursuant to \$90.119 shall be multiplied by the applicable df determined under \$90.104 (g) or (h). The product of the two numbers shall be rounded to the same number of decimal places contained in the applicable standard, and compared against

the applicable standard or FEL, as appropriate.

[60 FR 34598, July 3, 1995, as amended at 61 FR 20742, May 8, 1996; 64 FR 15239, Mar. 30, 1999]

## \$90.119 Certification procedure—testing.

- (a) Manufacturer testing. The manufacturer must test the test engine using the specified test procedures and appropriate test cycle. All test results must be reported to the Administrator.
- (1) The test procedure to be used is detailed in Subpart E of this part.
- (i) Class I, I-B, and II engines must use Test Cycle A described in Subpart E of this part, except that Class I, I-B, and II engine families in which 100 percent of the engines sold operate only at rated speed may use Test Cycle B described in Subpart E of this part.
- (ii) Class I–A, III, IV, and V engines must use Test Cycle C described in subpart E of this part.
- (2) Emission test equipment provisions are described in subpart D of this part.
- (b) Administrator testing. (1) The Administrator may require that any one or more of the test engines be submitted to the Administrator, at such place or places as the Administrator may designate, for the purposes of conducting emission tests. The Administrator may specify that testing will be conducted at the manufacturer's facility, in which case instrumentation and equipment specified by the Administrator must be made available by the manufacturer for test operations. Any testing conducted at a manufacturer's facility must be scheduled by the manufacturer as promptly as possible.
- (2)(i) Whenever the Administrator conducts a test on a test engine, the results of that test will, unless subsequently invalidated by the Administrator, comprise the official data for the engine and the manufacturer's data will not be used in determining compliance with emission standards.
- (ii) Prior to the performance of such test, the Administrator may adjust or cause to be adjusted any adjustable parameter of the test engine which the Administrator has determined to be subject to adjustment for certification